description provided herein is explicitly disclosed in the provisional patent application; much of the additional material of aspects of the invention will be recognized by those skilled in the relevant art as being inherent in the detailed description provided in such provisional patent application, or well known to those skilled in the relevant art. Those skilled in the relevant art can implement aspects of the invention based on the flowchart of Figure 2 and the detailed description provided in the provisional patent application.

[0032]   At block 202, a caller places a call from the phone 115 to the user. The call can be placed to the user's phone 101, or to another user device, such as a cell phone or fax machine. A call placed to any user device that is recognized by the TSPS 103 and associated with the user will be handled according to the embodiment. The TSPS 103 includes a telephony switch for receiving telephone calls from the PSTN 102. The telephony switch may also redirect or re-route those received calls anywhere on the PSTN 102. The incoming call may have a calling line identification (CLI) number or similar identifying data associated with it, where the number is typically the phone number of the calling device (the phone 115). The CLI is a unique identifier for the calling device. Because one person typically uses devices, the CLI usually identifies the caller.

[0033]   As shown at block 204, the TSPS 103 then instructs the registration server 106 to search the contact information database 108 using the CLI and the user phone number (dialed in digits) to find the handling code associated with the CLI. Alternatively, the registration server identifies and retrieves the user's account using other received information in the call, such as a direct inward dialing (DID) number, dialed number identification service (DNIS) data, or a automatic number identification (ANI) number. At block 206, the registration server 106 finds the current user status in the registration information database 107. At block 208, the registration server 106 searches the calendar events database 109 for any relevant calendar information. At 210, registration server 106 searches the user profile database 104 to find the handling method associated with the handling

code. At 212, the TSPS translates the handling code and uses all of the associated information to handle the call.

[0034] The flow shown in **Figure 2** illustrates the gathering of previously configured user information that is used by the TSPS to handle the call. The ordering of the flow diagram is for illustration and is not exclusive of any other orderings. It is not practical to list all of the call handling permutations available to the user in configuring the TSPS. For various calls, different elements of the previously configured information are needed to determine call handling. For example, the TSPS may determine how to handle some calls immediately after finding the status information. For other calls, the TSPS may need the calendar information, the status information, and the handling code.

[0035] Applying an example to the method of Figure 2 and the system of Figure 1, a caller places a call, via the phone 115, to a phone number hosted by the TSPS and associated with the user. The called number (e.g. for the phone 101) is routed via the PSTN 102 to the TSPS 103. The incoming call has a calling line identification (CLI) number associated with it, which indicates the phone number of the calling party. The TSPS 103 then looks at information in the user profile database 104 and determines that the user wishes to have her calls routed according to the screening information from her contact list. The TSPS then contacts the registration server 106, which in turn queries the contact information database 108 using the CLI and the called number as keys. In this example, the database contains a contact for this user with a number that matches the CLI, and thus the database query will return the numeric code to be used for screening this incoming call. The registration server 106 passes this numeric code back to the TSPS 102. The TSPS then uses that numeric code as a key to retrieve the associated call handling method to be used for this call. If, by way of example, the call handling method indicates that the call should be forwarded to the user's current phone number, then the TSPS 102 will reroute the call using its internal telephony switch via the PSTN 102 to the user's phone 101. In another embodiment, the TSPS 102 may use call transfer or similar features of the PSTN

to perform this call forwarding, eliminating the need for a switching function within the TSPS 102.

[0036]   Under one embodiment of the invention, the user may configure and use the TSPS 103 through the user interface of the component 112. One embodiment of this user interface will be described with reference to **Figures 3-13**. The user interface of **Figures 3-13** is part of a communication management system as described with reference to **Figures 1** and **2**, including client software that provides desktop management and control of incoming calls and messages. Such software (designated as "iControl" in Figures 3-6) provides an Internet or web-based conduit between a user's existing contact and calendar management software (such as Microsoft Outlook or Lotus Notes) and the user's telecommunications service provider, such as a one-number system (or TSPS number). The system provides real time call control, for example with pop-up dialogue boxes on the user computer 111. The user also receives real time message notification. Call control can also be distributed across a community of users, as illustrated by the communication between the user computer 111 and the attendant computer 118. Thus, this embodiment permits call control to be distributed between two or more computers connected via a local area or wide area network (such as between a user and her secretary, receptionist and/or administrative assistant).

[0037]   Referring to **Figure 3**, an example of a login screen is shown, where the user enters his or her assigned TSPS telephone number and associated personal identification number (PIN). The user may also select a box to save the PIN number, and/or a box to automatically log the user in to the registration server 106 (via the Internet 110), when booting up the user computer 111.

[0038]   Referring to **Figure 4**, a suitable display screen 401 for displaying user control of incoming calls on the user computer 111 is shown. A user status button 402, setup screen button 403, and help button are clicked to display status, setup and help screens, respectively. By selecting the user status button 402 a user may indicate his or her status as either available or unavailable to receive calls.